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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,388	08/31/2000	Gudmundur "Jim" Hjartarson	20510-4.00US	2861
20350	7590 02/23/2004		EXAM	INER
TOWNSEN	D AND TOWNSEND	GHULAMALI, QUTBUDDIN		
TWO EMBA	RCADERO CENTER			
EIGHTH FLO	OOR		ART UNIT	PAPER NUMBER
SAN FRANCISCO, CA 94111-3834			2631	13
			DATE MARKED 00/00/0004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/652,388	HJARTARSON ET AL.			
Office Action Summary	Examiner	Art Unit			
	Qutub Ghulamali	2631			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 11 D	ecember 2003.				
2a)☐ This action is <b>FINAL</b> . 2b)⊠ This	This action is FINAL. 2b)⊠ This action is non-final.				
•	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ⊠ Claim(s) <u>1-62</u> is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ⊠ Claim(s) <u>31-62</u> is/are allowed.  6) ⊠ Claim(s) <u>1-3,5,11-13,15-17,23,24 and 28-30</u> is 7) ⊠ Claim(s) <u>4,6-10,14,18-22 and 25-27</u> is/are object to restriction and/o	wn from consideration.  /are rejected.  ected to.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct	epted or b)  objected to by the drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
11) The oath or declaration is objected to by the Ex	•	•			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the prio application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)		•			
1) Notice of References Cited (PTO-892)	4) Interview Summary				
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>	Paper No(s)/Mail D 5)  Notice of Informal F 6)  Other:	ate Patent Application (PTO-152)			

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#### **DETAILED ACTION**

## Acknowledgment

1. This Office Action is responsive to the Amendment filed on 12/11/2003.

## Response to Arguments

3. Applicant's arguments with respect to claims 1-13 and the newly cited claims 14-62 and subsequent dependent claims, have been considered, but are moot in view of the new ground(s) of rejection. Rejections based on the newly cited reference(s) follow:

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3, 5, 11, 15, 16, 23, 24, 29, 30, are rejected under 35 U.S.C. 102(b) as being anticipated by the prior art of instant application.

Regarding claims 1, 5, 11, 15, 16, 23, 24, 29, 30, the prior art of the instant application (fig. 2) discloses a communication system network configuration of a Multi Service Data Network (MSDN) having more aggregate bandwidth which enable the routing and switching of packets or cells (voice and data) to a conventional telephone

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comprising the MSDN 32 interconnect various Digital Subscriber Loop Access

Multiplexers (DSLAMs) 34 with multiple DSL Line Cards 36 that interfaces to and
communicates over a twisted pair loop 18 (transmission medium) to DSL customer
premise equipment (CPE), DSL CPE may be self contained and connected to a source of
packet/cell data such as a computer (not shown), may be a DSL network interface card
(NIC (not shown) internal to a computer or CPE herein called voice packetizing CPE 38
transforms the analog signals from a conventional telephone terminal 20 into voice
packets or cells, the CPE 38 includes most of the functions associated with a
conventional telephone switch POTS line card 16 in its voice engine 42 and analog front
end 44, a voice over internet protocol (VoIP) or Voice over Asynchronous Transfer Mode
(VoATM) engine 46, the packet/cell stream generated by the VoIP/VoATM 46 is
transmitted to and received from the DSLAM 34 by means of the DSL modem 40 (see
specification pages 2-3, lines 30-34, 1-34 respectively).

Regarding claims 2, 3, the prior art of the instant application (figs. 1, 2) discloses a conventional telephone terminal 20, the voice packetized CPE 38 include most of the functions associated with a conventional telephone switch POTS line card 16 in its voice engine 42 and analog front end 44 (see specification page 3, lines 15-17).

#### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claims 12, 13, 17, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art of the instant application in view of O'Toole et al (US Patent No. 5,889,856).

Regarding claims 12, 13, 17, the prior art of the instant application (fig. 2) discloses a communication system network configuration of a Multi Service Data Network (MSDN) having more aggregate bandwidth which enable the routing and switching of packets or cells (voice and data) to a conventional telephone comprising the MSDN 32 interconnect various Digital Subscriber Loop Access Multiplexers (DSLAMs) 34 with multiple DSL Line Cards 36 that interfaces to and communicates over a twisted pair loop 18 (transmission medium) wherein the Modem is a DSL Modem at customer premise equipment (CPE), DSL CPE may be self contained and connected to a source of packet/cell data such as a computer (not shown), may be a DSL network interface card (NIC (not shown) internal to a computer or CPE herein called voice packetizing CPE 38 transforms the analog signals from a conventional telephone terminal 20 into voice packets or cells, the CPE 38 includes most of the functions associated with a conventional telephone switch POTS line card 16 in its voice engine 42 and analog front end 44, a voice over internet protocol (VoIP) or Voice over Asynchronous Transfer Mode (VoATM) engine 46, the packet/cell stream generated by the VoIP/VoATM 46 is transmitted to and received from the DSLAM 34 by means of the DSL modem 40 (see specification pages 2-3, lines 30-34, 1-34 respectively). However, the prior art of the instant application fails to disclose the line card is operative to receive said data signal on

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the same loop as said voice signal and wherein broadband analog front end separates said data signal from said voice signal.

O'Toole et al disclose a wide-band 5 carries the bulk of the ADSL-line bandwidth data to the customer, the ADSL uses the high frequencies for data traffic and low frequencies for voice calls, the signal received over copper phone line 20 is split (separates) into high-and low frequency components (see column 2 line 58-67; col. 2, line 24-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of O'Toole et al into the prior art of the instant application to allow effective data and voice operations.

Regarding claim 28; and in combination with the disclosed prior art, O'Toole et al further discloses (fig. 8), PCM highway 34 are decoded by decoder 74 wherein either a A-Law or u-Law encoding is normally used for transmitting voice calls over PCM highway 34 (see col. 9, lines 37-44). Therefore, it would have been obvious to one of ordinary Skill in the art at the time the invention was made to incorporate the teaching of O"Toole et al's into the prior art of the instant application to allow digitizer circuit Implement one A-Law code and a u-Law code for greater flexibility.

## Allowable Subject Matter

- 5. Claims 4, 6-10, 14, 18-22, 25-27 are objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.
- 6. Claims 31-50, 51-62 allowed.

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### Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hwang et al (US Patent 6,535,505), Gerszberg et al (US Patent 5,970,473), Akers (US Patent 5,883,941) are cited as arts of interest.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qutub Ghulamali whose telephone number is (703) 305-7868. The examiner can normally be reached on Monday-Friday from 8:00AM 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 703 306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QG. February 17, 2004

JEAN B. CORRIELUS PRIMARY EXAMINER 2/19/04